Please replace the paragraph on page 1, lines 10-15, with the following paragraph:

In the conventional optical disc, a user data, ID information, and control information are coded as one block for error correction, and the coded data are modulated, and a sync signal is added to the modulated data for writing to the optical disc. Generally, the user data has been pre-coded for an error correction (EDC is added to the user data) separately from the above-mentioned error-correcting coding.

a2

Please replace the paragraph on page 1, beginning at line 18 to page 2, line 4, with the following paragraph:

FIG. 2 shows a data format for a DVD, as an example. In this data format, one sector contains a 2-kB user data, control and ID information, and EDC information. One block consists of 16 sectors, and an information word containing 16 sectors of user data, control and ID information, and EDC information is coded for error correction (parity is added). In the DVD, RSPC (Reed Solomon product code) is used as correcting code (in this respect, this data format for the DVD is different from that shown in FIG. 1). Assume here that the line direction is Cl and the row direction is C2. Cl is RS (182, 172, 11) while C2 is RS (208, 192, 17).

a3

Please replace the paragraph on page 2, beginning at line 17 to page 3, line 3, with the following paragraph:

For reading from the optical disc, an FS signal is used for frame synchronization, then ID information is used for sector synchronization. Thus, the data position in one block is known. So, the ID information has to be disposed in a direction of data on the optical disc. Also, it has to be disposed in the same position in each physical sector. FIG. 3 shows the ID

a4

information positioned at the head of each physical sector, for example. On the DVD, the direction of user data is the same as on the optical disc. It should be noted that the operations such as scramble will not be described herein.

Please replace the paragraph on page 3, lines 4-21, with the following paragraph:

Recently, an optical disc having a larger capacity and a higher transfer rate and a disc drive for such an optical disc are demanded for use to store dynamic images, etc. In particular, recordable type and rewritable disc systems have to be of a rather large capacity to assure a sufficient quality of an image since the image information cannot easily be real-time compressed at high efficiency, depending upon the content thereof. For such a larger capacity of the optical disc, there are available methods such as increased NA (numerical aperture) of the optical system for data write and/or read and decrease in thickness of the disc substrate to assure a sufficient skew margin, etc. However, since the increase in capacity will lead to a higher recording density of the optical disc and the decrease in the thickness of the disc substrate will cause the disc to be adversely affected by dust, it is desirable to assure the larger capacity of the optical disc by improving the capability of error correction. The optical disc should desirably be strong against a burst error, among others. On the other hand, for a larger capacity of the optical disc, the coding efficiency should not be too low. For these purposes, it has been proposed to enlarge the error-correcting code, namely, to increase the size of the ECC block. However, it is difficult to use the normally used PC (product code) of GF (2^8) in a larger ECC block than used in the DVD technology, for example, an ECC block containing more than 64 kB of user data.

Please replace the paragraph at page 5, lines 11-12, with the following paragraph:

a6

One block of data is equivalent to 32 physical sectors on the optical disc. One physical sector on the optical disc consists of 10 frames, each of 240-byte data.

Please replace the paragraph at page 5, lines 13-19, with the following paragraph:

a7

For reading from the optical disc, an FS signal is used for frame synchronization, then ID information is used for sector synchronization. Thus, the data position in one block is known. So, the ID information has to be disposed in a direction of data on the optical disc. Also, the ID information has to be disposed in the same position in each physical sector. As shown in FIG. 5, the ID information is positioned at the head of each physical sector, for example.

Please replace the paragraph on page 6, lines 6-12, with the following paragraph:

a8

As mentioned above, for providing a large-capacity, high transfer-rate optical disc format and optical disc drive, it may be possible to provide the interleave length, enhance the error-correcting capability by using an error-correcting code of a long code distance (LDC), and raise the writing and reading speed by disposing the error-correcting code in the same direction as user data. In this case, however, since parities in ID information and user data interfere with each other, it is not easy to form such a data format.